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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,424	06/12/2001	Yuichi Matsuda	Y&A-124	2298

21839 7590 03/19/2003

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EXAMINER

SZEKELY, PETER A

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 03/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/878,424

Applicant(s)

MATSUDA ET AL.

Examiner

Peter Szekely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 12-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 12-31 and 34-45 is/are rejected.
- 7) ☒ Claim(s) 32 and 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 12-19, 22-31 and 34-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 2 is indefinite because of the phrase "triazine derivative". Carbon dioxide is a derivative of triazine. It is derived by burning. Claims 43 and 45 have no antecedent basis in claim 1. Claims 18 and 41 are identical. The rest of the rejected claims contain improper Markush language. If the conjunction is "and" the claim has to say, "selected from the group consisting of", unless applicants are claiming the blend of all the ingredients in those claims.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 3, 12-21, 34-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinen et al. US 2002/0010237, Greigger et al. 6,479,574, Wang et al. 6,291,068, Breant 6,025,423, Breuer et al. 6,000,189, Fukumura et al. 5,795,930, Martens et al. 5,708,065, Staendeke et al. 4,957,950 or Mathis et al. 3,810,862.

7. Heinen et al. disclose polyester and polyamide in paragraph 003, melem, melam and melamine in paragraph 0012, pentaerythritol in paragraph 0026 and zinc oxide, magnesium oxide, alumina, magnesium and aluminum hydroxide, ammonium polyphosphate and melamine pyrophosphate in paragraph 0028 and injection molding in paragraph 0031. Greigger et al. teach polyesters in column 3, line 22-36, melamine phosphates in column 5, line 21, melamine in column 5, line 46, pentaerythritol in column 7, line 64 and aluminum oxide in column 9, line 38. Wang et al. recite ammonium polyphosphate in the Abstract, polymers in columns 10-14, melamine phosphate in column 6, line 19, aluminum and magnesium hydroxide, pentaerythritol, melamine and melamine cyanurate in column 15, lines 45-61. Breant divulges polyamide and polyethylene in the Abstract, aluminum and magnesium hydroxide and hydrotalcite in column 4, lines 55-56, pentaerythritol in column 4, line 67, ammonium polyphosphate and melamine cyanurate in column 5, lines 2-3 and molding in column 7, lines 1-3. Breuer et al. reveal HDPE in column 2, line 66 and fire retarders in Example

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2. Fukumura et al. display magnesium, aluminum and calcium hydroxide, magnesium and aluminum oxide and hydrotalcite in column 8, lines 15-30, melamine and ammonium polyphosphate in column 8, lines 50-52, pentaerythritol in column 15, lines 36-38, molding in the Examples and polymers in columns 13-14. Martens et al. present polyester and polyamide in the Abstract, melamine phosphate or pyrophosphate in column 3, lines 12-14, pentaerythritol in column 3, lines 59-60, melamine cyanurate in column 3, lines 65-67 and magnesium hydroxide in column 18, line 8. Staendeke et al. describe aluminum hydroxide, ammonium polyphosphate, melamine, pentaerythritol and polyester in claim 1. Mathis et al. discuss polypropylene in column 1, line 51, ammonium polyphosphate, melamine and dipentaerythritol in column 1, lines 60-62 and zinc oxide in claim 4. It would have been obvious to one having ordinary skill in the art; at the time the invention was made, to select applicants' flame-retardants from a list of equivalents, since the cited references prove that said flame-retardants have customarily been used in the polymers cited by applicants. Since there is no particular significance attached to the amounts of fire retardants claimed by applicants and the cited references show the customary ranges coinciding with applicants' claims, the examiner considers those amounts obvious too.

***Allowable Subject Matter***

8. Claims 32 and 33 are would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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9. Claims 2 and 22-31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is 703-308-2460. The examiner can normally be reached on Tuesday-Friday 7:00 a.m.-5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Peter Szekely  
Primary Examiner  
Art Unit 1714

P.S.  
March 13, 2003